Claims:

1. A motor control apparatus that controls a motor, which is mounted on a vehicle and outputs power to a drive shaft linked to drive wheels, said motor control apparatus comprising:

a skid detection module that detects a skid due to wheelspin of the drive wheels;

a torque restriction control module that, in response to detection of a skid by said skid detection module, sets torque restriction for reduction of the skid and controls said motor under the torque restriction; and

a torque restriction cancellation control module that, in response to at least a reducing tendency of the skid, cancels the torque restriction, which is set by said torque restriction control module, to a specific degree corresponding to a variation in driver's accelerator operation, and controls said motor under at least partly cancelled torque restriction.

2. A motor control apparatus in accordance with claim 1, wherein the variation in driver's accelerator operation represents a rate of change relative to a reference accelerator operation at a time of detection of a skid by said skid detection module.

3. A motor control apparatus in accordance with either one of claims 1 and 2, wherein said torque restriction cancellation control module cancels the torque restriction in a stepwise manner with elapse of time.

4. A motor control apparatus in accordance with claim 3, wherein said torque restriction cancellation control module controls the motor with a tendency of increasing a cancellation rate of the torque restriction with an increase in driver's additional depression of an accelerator pedal as the variation in driver's accelerator operation.

5. A motor control apparatus in accordance with either one of claims 3 and 4, wherein said torque restriction cancellation control module controls the motor with a tendency of shortening a cancellation time of the torque restriction with an increase in driver's additional depression of an accelerator pedal as the variation in driver's accelerator operation.

6. A motor control apparatus in accordance with any one of claims 1 through 5, said motor control apparatus further comprising:

an angular acceleration measurement module that measures an angular acceleration of either of the drive shaft and a rotating shaft of the motor,

wherein said skid detection module detects a skid, based on a variation in measured angular acceleration, and

said torque restriction control module, in response to detection of a skid, changes a degree of the torque restriction corresponding to the angular acceleration measured by said angular acceleration measurement module and controls the motor under the changed degree of the torque restriction.

7. A motor control apparatus in accordance with any one of claims 1 through 6, wherein said vehicle has driven wheels that are driven by the drive wheels,

said motor control apparatus further comprising:

a drive wheel rotation speed measurement module that measures a rotation speed of the drive wheels; and

a driven wheel rotation speed measurement module that measures a rotation speed of the driven wheels;

wherein said skid detection module detects a skid, based on a rotation speed difference between the rotation speed of the drive wheels measured by said drive wheel rotation speed measurement module and the rotation speed of the driven wheels

measured by said driven wheel rotation speed measurement module, and

said torque restriction control module, in response to detection of a skid, changes a degree of the torque restriction corresponding to the rotation speed difference and controls the motor under the changed degree of the torque restriction.

8. A motor control apparatus in accordance with any one of claims 1 through 7, said motor control apparatus further comprising:

a torque re-restriction control module that, in response to detection of another skid by said skid detection module under control of the motor by said torque restriction cancellation control module, sets torque re-restriction for reduction of the another skid and controls the motor under the torque re-restriction

9. A motor control apparatus in accordance with claim 8, said motor control apparatus further comprising:

an angular acceleration measurement module that measures an angular acceleration of either of the drive shaft and a rotating shaft of the motor,

wherein said skid detection module detects a skid, based

on a variation in measured angular acceleration, and

said torque re-restriction control module, in response to detection of another skid by said skid detection module, changes a degree of the torque re-restriction corresponding to a peak value of the angular acceleration measured by said angular acceleration measurement module and controls the motor under the changed degree of the torque re-restriction.

10. A motor control apparatus in accordance with either one of claims 8 and 9, said motor control apparatus further comprising:

a torque restriction re-cancellation control module that cancels the torque re-restriction set by said torque re-restriction control module after elapse of a preset time period corresponding to a variation in driver's accelerator opening, regardless of state of the another skid, and controls the motor under the cancelled torque re-restriction.

11. A vehicle equipped with a motor and a motor control apparatus in accordance with any one of claims 1 through 10.

12. A motor control method that controls a motor, which is mounted on a vehicle and outputs power to a drive shaft linked

to drive wheels, said motor control method comprising the steps of:

(a) detecting a skid due to wheelspin of the drive wheels;

(b) in response to detection of a skid by said step (a), setting torque restriction for reduction of the skid and controlling said motor under the torque restriction; and

(c) in response to at least a reducing tendency of the skid, canceling the torque restriction, which is set by said step (b), to a specific degree corresponding to a variation in driver's accelerator operation, and controlling said motor under at least partly cancelled torque restriction.

13. A motor control method in accordance with claim 12, wherein the variation in driver's accelerator operation represents a rate of change relative to a reference accelerator operation at a time of detection of a skid by said step (a).

14. A motor control method in accordance with either one of claims 12 and 13, wherein said step (c) cancels the torque restriction in a stepwise manner with elapse of time.

15. A motor control method in accordance with claim 14, wherein said step (c) controls the motor with a tendency of

increasing a cancellation rate of the torque restriction with an increase in driver's additional depression of an accelerator pedal as the variation in driver's accelerator operation.

16. A motor control method in accordance with either one of claims 14 and 15, wherein said step (c) controls the motor with a tendency of shortening a cancellation time of the torque restriction with an increase in driver's additional depression of an accelerator pedal as the variation in driver's accelerator operation.